Contents:

INTRODUCTION, About Julia Ruffin Robertson p.3
FIRST, The patent-pending on papaya leaf extraction [tea] to prevent and treat cancer. p.4
SECOND, Stories of people who were actually cured by papaya leaf tea. p.8
THIRD, The science of how the tea works. p.9
FOURTH, The reason my doctor does not prescribe papaya leaf tea. p.13
FIFTH, Evidence that papaya leaf tea is an ethnomedicine with cultural and historical relevance. p.15
SIXTH, What the FDA is not. p.17
PRIORITY, Papaya leaf tea can treat Malaria, the world’s #1 killer of children. p.27
CONCLUSION, Advice from the “Father of Medicine” p.29
When I first read the claim that a papaya leaf dried and put in hot water makes a tea that can treat, slow down, or prevent cancer I did not believe this was truth. The form that I first read this claim was in an international patent-pending and my first thought was, “How dare this person make this claim”. To me, this claim had potential to be hugely offensive. I lost my mother to cancer when she was fifty-five, just at the most exciting part of her career, and certainly not because she had done anything to “deserve” cancer. My mother lived the life of a saint; always two steps behind my father holding him up. She followed him all the way to Africa because he wanted to be a missionary—only to lose her life to cancer when it was finally her chance to become accomplished as an artist and art historian. So to me, the opportunity of a very simple papaya leaf to make a tea that could have given my mother more life is a very serious claim.

Honestly, I probably followed up on it out of anger.

My merciful God quickly turned my anger into hope. Frantically I looked for some evidence that this little leaf was a lie. What I got was not faith, but something much more human. I got scientific proof. I found more scientists from all over the world who made the same claim. There were clinical trials. For example, 226 people in Switzerland with stage four cancer. The 160 patients that got the leaf enzyme lived three extra years. I have frustration that all of these scientists and doctors can speak of the life-giving miracle in this leaf and I don’t understand why nobody “regular” knows.

I ordered three papaya trees online to grow in my backyard. I was going to make the tea myself to see how it made me feel. This was too easy. I just took leaves off of the baby trees as they grew (I always left two), let them air dry, crushed them with my hand into my coffee-maker filter and pressed “brew”. The tea tastes like green tea. I've been drinking about a pot a day since. Now four months later I have two hundred trees in my backyard, and four hundred still trying to come out of the soil. I am admittedly obsessed.

I am writing this book because I want you to know what I’ve spent three hundred hours to learn. I am a special kind of learner in that my training is in information science. I am not the kind of scientist that studies the reaction of one particular kind of cell to one particular kind of stimulus for a lifetime. I am not the kind of scientist that has one very specific theory of how a specific category of people are affected by a specific chemical and am willing to spend twenty five years to do clinical studies to prove it. Instead, I am an information scientist. I can find the lifetime works of other scientists, studies going on now, cultural traditions, historical medicine and the changes over time, general theory, postulates, experiments, stories of the interaction of scientists and the business world, etc. I find this information, work until I feel that it is properly substantiated by other information and then draw logical, hopefully not too flawed, conclusions.

My soul and dear friend, Ms. Margaret Collins, told some people in her church about what she had heard about this leaf, the “papayasiz”. One of her church members and her husband came to my place of business and asked me if I was the one that knew about the papaya. We went into the office and I told them more about this leaf. I told her I’d give her some plants and some dried leaves for tea until the plants grew up. She said, “…The Lord will bless you seven times for telling me this…you could have kept this secret to yourself…” I’m humbled by her statement because I don’t know how I’m going to tell enough people in time to save their Moms and Dads. I wanted to tell Mr. and Ms. Johnson that I feel in my heart that God will bless me when I’ve told tens of thousands of people, and once I figure out a way for these people to actually have the blessings of this leaf for themselves.

Please help me in this way: If you read this book and then understand how I do, then find a way to use this leaf to the betterment of your own health. Then, if you can, tell this information to someone else who can benefit, too, like my dear friend did.
FIRST

Please find portions taken from the new patent-pending (Dec, 2006) below related to papaya leaves:

The following is the property of the World Intellectual Property Association:


• (WO/2006/004226) COMPOSITIONS FOR CANCER PREVENTION, TREATMENT, OR AMELIORATION COMPRISING PAPAYA EXTRACT

DESCRIPTION

COMPOSITIONS FOR CANCER PREVENTION, TREATMENT, OR AMELIORATION COMPRISING PAPAYA EXTRACT

Technical Field
The present invention relates to compositions or food compositions for cancer prevention, treatment, or improvement. More specifically, it relates to compositions or food compositions that comprise, as an active ingredient, components extracted by brewing leaves or other parts of the papaya plant (Carica papaya), and that are effective in the prevention, treatment, or improvement of stomach cancer, lung cancer, pancreatic cancer, colon cancer, uterine cancer, ovarian cancer or other solid cancers, or lymphoma, leukemia or other blood cancers.

Disclosure of the Invention
Accordingly, the objective of the present invention is to provide compositions or food compositions for cancer prevention, treatment, or improvement that are highly effective in the treatment and prevention of cancer, and yet have few side effects and a high level of safety. As a result of exhaustive research regarding the aforementioned objective, the present inventors discovered that components of papaya, preferably one or more extracted papaya components obtained by brewing papaya, have superior effects in the treatment of cancer, and that accordingly, they can become compositions or food compositions for cancer prevention, treatment, or improvement with few side effects and a high level of safety, thus completing the present invention. Accordingly, the present invention relates to compositions or food compositions for cancer prevention, treatment, or improvement that comprise as active ingredients one or more components of the papaya plant (Carica papaya), and preferably one or more components extracted by brewing a part of a papaya plant. A more detailed explanation of the present invention is provided below. The present invention uses components of the papaya plant (Carica papaya), preferably components extracted by brewing a part of a papaya plant tissue, as active ingredients. The tissue of the papaya plant may be any of its leaves, roots, stems or fruit, but the leaves are particularly preferable. Preferably, this papaya tissue is dried, and the dried material thus obtained is added to cold water or boiling water, brewed for a long time, and the brew thus obtained is used as an active ingredient. Alternatively, without drying the papaya leaves (or some other tissue), the leaves may be added to cold water or boiling water and brewed. More specifically, papaya leaves, for example, may be left in the sun, normally for one or two days, and dried to obtain the dried material. One to several of these dried leaves are added to cold water or boiling water (normally 400 ml to 3000 ml), and preferably 500 ml to 1000 ml, and brewed for normally two hours to 15 hours, and preferably three hours to 12 hours. The vessel used for brewing is preferably not a metal vessel, but rather a glass, wooden, plastic or other vessel. A component thus obtained, particularly a component extracted by brewing papaya, comprises the effect of suppressing the proliferation of cancer cells, and can be used as it is as an active ingredient of the composition or food composition according to the present invention.

The dose of the brew/extract components or fractionated components thereof to be administered will depend on the dosage form, symptoms of the subject, type of cancer or the like. However, for example, when the brew/extract is taken, it is normally preferable to take an amount of 100 ml to 750 ml per day, every day for between one month and three months. When the fractionated
components are taken, it is preferable to take an amount of 10 ml to 200 ml per day, every day for between one month and three months. Also, the present invention provides food compositions that comprise a papaya (Carica papaya) brew/extract as an effective ingredient for preventing or treating cancer. In addition to general foods, a food composition of the present invention may include, for example, a health food, a functional food, a specified health food, a nutrient supplement, an enteral nutrient, and the like, but is not limited to these foods so long as it is effective in preventing or ameliorating cancer. Methods for manufacturing the food compositions are usual techniques known to those skilled in the art. That is, a papaya (Carica papaya) brew/extract component according to the present invention can be combined with an additive acceptable in view of food sanitation, and processed to make a general food, a health food, a functional food, a specified health food, a nutrient supplement, an enteral nutrient, etc. For example, an additive such as a stabilizer, preservative, colorant, perfume, vitamin can be appropriately added to a papaya (Carica papaya) brew/extract component, mixed, and processed by standard methods into a form suitable for a food composition, such as a tablet, pill, granule, powder, capsule, liquid, cream, drink, etc. Furthermore, the food compositions of the present invention include those sold with a description or indication written on the food composition’s packaging container and/or in a promotional pamphlet, to the effect that the food composition, and/or an ingredient in the food composition, comprises the effect of preventing, or ameliorating cancer.

Brief Description of the Drawings FIG. 1 depicts graphs showing the anti-tumor effect of a papaya leaf extract according to the present invention on AGS (a stomach cancer cell line: 1000 cells/well and 2000 cells/well, cultured for three days). FIG. 2 depicts graphs showing the anti-tumor effect of the papaya leaf extract according to the present invention on Capan-1 (a pancreatic cancer cell line: 1000 cells/well and 2000 cells/well, cultured for five days; 40000 cells/well, cultured for four days). FIG. 3 is a graph showing the anti-tumor effect of the papaya leaf extract according to the present invention on DLD-1 (a colon cancer cell line: 20000 cells/well, cultured for four days). FIG. 4 is a graph showing the anti-tumor effect of the papaya leaf extract according to the present invention on DOV-13 (ovarian cancer cell line: 3000 cells/well, cultured for two days). FIG. 5 is a graph showing the anti-tumor effect of a 50-fold-diluted papaya leaf extract according to the present invention on Karpas (a lymphoma cell line). FIG. 6 depicts graphs showing the anti-tumor effect of the papaya leaf extract according to the present invention on MCF-7 (breast cancer cell line: 2500 cells/well and 7500 cells/well, cultured for six days). FIG. 7 depicts graphs showing the anti-tumor effect of the papaya leaf extract according to the present invention on T98G (a neuroblastoma cell line: 2000 cells/well and 4000 cells/well, cultured for three days). FIG. 8 is a graph showing the proliferation suppression effect of the papaya leaf extract according to the present invention on HeLa (a uterine cancer cell line). FIG. 9 depicts graphs showing the proliferation suppression effect of the papaya leaf extract according to the present invention on Karpas (a lymphoma cell line). FIG. 10 depicts graphs showing the proliferation suppression effect of the papaya leaf extract according to the present invention on CD26 negative Jurkat (T cell leukemia cell line). FIG. 11 depicts graphs showing the proliferation suppression effect of the papaya leaf extract according to the present invention on CD26 positive Jurkat (T cell leukemia cell line). FIG. 12 shows the results of measurement of the suppression effect of Jurkat T cell proliferation by components of papaya leaf extract fractionated by gel filtration chromatography.

CLAIMS
1. A composition for the prevention, treatment, or amelioration of cancer, comprising as an active ingredient, components extracted by brewing papaya (Carica papaya). 2. The composition according to Claim 1, wherein the active ingredient is an extract of papaya leaves. 3. The composition according to Claim 1 or 2, wherein the active ingredient is a component derived from an extract of papaya leaves that, when subjected to gel filtration chromatography using a gel filtration column filled with cross-linked polyvinyl alcohol gel, said gel filtration column having an exclusion limit molecular weight of 40,000 when pullulan is used as a sample, is eluted in a portion of the eluate equivalent to 50-70 vol.% of the volume of the column.
4. The composition according to any one of Claims 1 to 3 used for the prevention or treatment of solid cancers or blood cancers. 5. The composition according to any one of Claims 1 to 4, wherein the composition is in the form of a drink, powder or tablet. 6. A food composition for preventing or ameliorating cancer, comprising as an active ingredient components of apapaya (Carica papaya) extract. 7. The food composition according to Claim 6, wherein the active ingredient is an extract of papaya leaves. 8. The food composition according to Claim 6 or 7, wherein the active ingredient is a component derived from an extract of papaya leaves that, when subjected to gel filtration chromatography using a gel filtration column filled with cross-linked polyvinyl alcohol gel, the component is eluted in a portion of the eluate equivalent to 50 to 70 vol.% of the volume of the column, wherein the gel filtration column has an exclusion limit molecular weight of 40,000 when pullulan is used as a sample. 9. The food composition according to any one of Claims 6 to 8 used for the prevention or amelioration of solid cancers or blood cancers. 10. The food composition according to any one of Claims 6 to 9, wherein the food composition is in the form of a drink, powder or tablet. 11. The food composition according to any one of Claims 6 to 10, wherein the food composition is a health food, a functional food, a specified health food, a nutrient supplement, or an enteral nutrient. 12. A method for preparing a composition that suppresses the proliferation of cancer cells, the method comprising preparing an extract from leaves or other tissues from a papaya plant, wherein the extract so prepared is a composition that suppresses the proliferation of cancer cells. 13. The method of claim 12, further comprising concentrating the extract. 14. The method of claim 12, further comprising concentrating the extract by at least about two-fold, at least about four-fold or at least about eight-fold. 15. The method of claim 12, wherein preparing the extract comprises brewing the leaves or other tissues from a papaya plant in an aqueous solution. 16. The method of claim 13, wherein the leaves or other tissues from papaya plant are heated in an aqueous solution for about two to about 15 hours. 17. The method of claim 12 further comprising subjecting the extract to column chromatography and collecting an eluted fraction or fractions, wherein at least one eluted fraction so collected is a composition that suppresses the proliferation of cancer cells. 18. A method for preparing a composition that suppresses the proliferation of cancer cells, the method comprising: (i) preparing an extract from leaves or other tissues from a papaya plant, (ii) subjecting the extract to column chromatography, and (iii) collecting an eluted fraction or fractions, wherein at least one eluted fraction so collected is a composition that suppresses the proliferation of cancer cells. 19. The method of claim 17 or 18, wherein the at least one fraction so collected comprises a component detectable by an RI detector and having a molecular weight selected from about 1700, about 1000, about 700, about 600, about 400 and about 300. 20. The method of claim 17 or 18, wherein the at least one fraction so collected comprises a component detectable by a UV detector at 260 nm and having a molecular weight selected from about 1700 and about 1000. 21. The method of claim 17 or 18, wherein the at least one fraction so collected comprises a component detectable by a UV detector at 260 nm and having a molecular weight from about 300 to about 700. 22. The method of claim 17 or 18, wherein subjecting the extract to column chromatography comprises employing a gel filtration column filled with cross-linked polyvinyl alcohol gel. 23. The method of claim 17 or 18, wherein subjecting the extract to column chromatography comprises employing column having an exclusion limit molecular weight of about 2,000 or higher. 24. The method of claim 23, wherein the exclusion limit molecular weight is selected from about 2,000 or higher, about 4,000 or higher, about 10,000 or higher, about 20,000 or higher, and about 40,000 or higher. 25. The method of claim 23, wherein the exclusion limit molecular weight is about 40,000. 26. A composition obtained by the method of any one of claims 12 to 25. 27. A composition obtained by the method of any one of claims 12 to 25. 28. A method for preventing or treating cancer, the method comprising administering to a subject in need thereof an effective dose of the composition of claim 26 or 27. 29. The method of claim 28, wherein the cancer is selected from the group consisting of stomach cancer, lung cancer, pancreatic cancer, liver cancer, colon cancer, uterine cancer, ovarian cancer, breast cancer, neuroblastoma, lymphoma, and leukemia. 30. A method for preventing or treating cancer, the method comprising administering to a subject in need thereof an effective dose of a composition comprising an extract from leaves or other tissues from a papaya plant, wherein the extract is a composition that suppresses the proliferation of cancer cells. 31. A method for preventing or treating cancer, the method comprising administering to a subject in need thereof an effective dose of a composition comprising an extract from leaves or other tissues from a papaya plant, wherein the extract is a composition that suppresses the proliferation of cancer cells.
dose of a composition comprising a fraction or fractions collected by subjecting an extract from leaves or other tissues from a papaya plant to column chromatography, wherein at least one fraction so collected is a composition that suppresses the proliferation of cancer cells. 32. Use of a component of a papaya extract in the preparation of a medicament for the prevention, treatment, or amelioration of cancer. 33. The use of claim 32, wherein the extract is prepared by brewing papaya. 34. The use of claim 33, wherein the extract is prepared by brewing papaya and then filter-sterilizing it. 35. The use according to Claim 32, wherein the extract is an extract of leaves or other tissue of a papaya plant. 36. The use of claim 32, wherein the medicament is used for the prevention, treatment, or amelioration of solid cancers or blood cancers. 37. The use of claim 32, wherein the medicament is in the form of a drink, powder or tablet. 38. The use of claim 32, wherein the medicament further comprises a pharmaceutically acceptable excipient or additive. 39. Use of a component of a papaya extract in the preparation of a food composition for the prevention, treatment, or amelioration of cancer. 40. The use of claim 39, wherein the extract is prepared by brewing papaya. 41. The use of claim 39, wherein the extract is prepared by brewing papaya and then filter-sterilizing it. 42. The use according to Claim 39, wherein the extract is an extract of leaves or other tissue of a papaya plant. 43. The use of claim 39, wherein the food composition is used for the prevention, treatment, or amelioration of solid cancers or blood cancers. 44. The use of claim 39, wherein the food composition is in the form of a drink, powder or tablet. 45. The use of claim 39, wherein the food composition further comprises an additive.

This patent-pending led me to believe that there is enough possibility in a cure for cancer by papaya leaf tea to look into it further. I had been frustrated with being bombarded by the “help prevent” foods. It seemed to me that every way we turn in this society is a carcinogen. This appeared to me to be an actual potential cure...not just an antioxidant or a free-radical fighter.

“...Dr. Edward Howell, M.D. notes in his seminal work Enzyme Nutrition, that the pancreas (which was just mentioned) has a limited capability to produce enzymes. Add to that the fact that the pancreas is almost always over-worked trying to produce enough digestive enzymes to digest the cooked food that we eat. Cooked, refined and processed foods have no enzymes. The body is at greatest risk of cancer when the pancreas can no longer produce an adequate supply of protein digesting enzymes.

But there is good news! Through diet, we can do something about a scarcity of protein digesting enzymes. It is possible to make it so the pancreas does not have to work so hard. That can be done by significantly decreasing the consumption of animal protein (because animal protein requires lots of protein digesting enzymes), and by eating more raw fruits, vegetables, and nuts, since they are rich in enzymes. And note this: the tropical fruits papaya (and their seeds) along with pineapple are especially important, because their enzymes closely mimic the protein digesting enzymes produced by the pancreas. (That’s why meat tenderizers contain papaya). Our first line of defense against cancer is therefore protein digesting enzymes (and other food enzymes) all of which can be gotten from raw whole foods....”

-Mauris Emeka, “Defending Against Cancer”, January 5, 2005
National Health Foundation
**SECOND**

Stories and Testimonials:

“……a banana grower aged 40, had two operations on his bladder for cancer which did not prevent metastasis. I placed him on a very simple diet consisting of zero junk food, fresh living foods with no preservatives, white flour, sugar, colourings or additives and told him to stuff a handful of papaya leaves into a saucepan and fill with water; boil, simmer for one hour and drink it till it comes out of your ears. He did so and five weeks later had no trace of cancer whatsoever…”

“….an elderly woman in Britain…was dying of bowel and stomach cancer and had been sent home to die. Because of the distance we decided to dry the leaves and grind them in the coffee grinder to send them to her. She…used them…and her cancer has gone without a trace…”

- www.rejoiceinlife.com/feedback/papaya.php

“I was dying from cancer in both lungs when it was suggested to me as an old Aboriginal remedy”…He said…I tried it for two months and then I was required to have a chest x-ray. They told me both lungs were clear. I told my specialists and they didn’t believe me until they had carried out their own tests. Then they scratched their heads and recommended I carryon drinking the extract I boiled out of papaya leaves. That was in 1962. The cancer never recurred. Since then, Mr. Sheldon has passed the recipe on to other cancer victims. “Sixteen of them were cured,” he said. Mr. Sheldon’s recipe involves boiling and simmering fresh papaya leaves and stems in a pan for two hours before draining and bottling the extract. He said the mixture could be kept in a refrigerator though it may ferment after three or four days. He said there were times when he found it difficult to obtain supplies of papaya leaves. “not everyone likes you removing them. They are afraid you swill ruin the tree. But Gold Coast papaya growers have responded generously to a plea for help by cancer victims desperate to find a cancer remedy.”

Mrs.K., a 74 year old woman had bladder cancer….Mrs.K had had an operation, however, the cancer could not be completely removed which is why she was supposed to have further treatment in Brisbane. Over a period of three months she used Papaya leaves, and as she ran out of leaves, she used the skin of the fruit which she boiled. When she went back to the doctor for a further check-up after that period, the diagnosis was that the cancer had been healed. A check-up four months later confirmed the original result. Reports confirm that Mrs. K.is feeling one hundred percent and she sees her result as proof that papaya has the ability to heal cancer….

-“Living Food for Longer Life”, Harold Tietze
THIRD

How could this plant treat and help to prevent cancer? How does it work?

The papaya leaf contains an enzyme called papain. This enzyme eats the protein coating around the cancer cell, which then allows your own body to destroy the cancerous cell. The enzyme also travels through your blood and stimulates the “big eaters” to consume the extra bad trash in your blood. Scientifically, “big eaters” are called macrophages, and “extra bad trash” are extra immune complexes that cause inflammation diseases and immune problems.

“All living things depend on the swift completion of thousands of biochemical reactions every hour. High temperatures generally speed up chemical reactions, but all complex life forms have metabolic temperatures below 40°C. In order to increase the pace of biochemistry, life forms are completely dependent on enzymes for virtually every metabolic function. Enzymes are protein molecules that catalyze chemical reactions. They act as intermediaries or facilitators to accelerate biochemical reactions. Enzyme catalysts are supposed to remain unchanged by the reactions they participate in; they are recycled to do their jobs over and over again. (1,2)

No biological system is perfect, least of all complex creatures such as mammals. Organs such as the pancreas secrete enzymes to aid in food digestion, but many of these enzymes are damaged or excreted during the process of digestion, absorption, and elimination, and are not recycled.

In other cases enzyme excretion may be insufficient for the needs of an individual, thereby hindering utilization of nutrients. Dr. Edward Howell hypothesized that a diet composed of cooked and processed foods in which the natural enzymes are denatured leads to enzyme insufficiency and stresses the organs which secrete enzymes (e.g. pancreas, duodenum). A lifetime of eating "dead foods" is a contributing factor for chronic indigestion, diabetes, obesity, pancreatitis, and gastrointestinal cancer. (3) It's well known that animals and humans eating what researchers call a "cafeteria diet" (just what you'd imagine all you can eat buffet of institutional food favorites) suffer inordinately from obesity, diabetes, pancreatitis, ulcers, and gall bladder disease.”


It helps to know what an enzyme is—and you need to know about as much as you need to know what an antibiotic is. An enzyme is a biological catalyst—like in a car, a “starter”, and “igniter”. The enzyme “starter” can effect a change without changing itself. Your body has over 3000 enzyme catalysts that we have been able to name. The very specific papain enzyme has a specialty to break up proteins (proteolytic). For the majority of Americans, our pancreas usually functions in this role to digest proteins pretty well until we’re about twenty-five years old. Then things kind of get backed up. The reason is that we eat dead food (which overworks our pancreas), and also because we don’t eat enough raw fruits and vegetables. By the time we hit twenty-five we have a body full of toxins, and habits that don’t help. But papain can help, not counting all of the other “secret” ingredients in the papaya leaf. Papaya leaf tea can make your body begin to work and fight again like a young person.

“The pancreas creates enzymes that digest proteins. Cancer is a foreign protein that the pancreatic enzymes attempt to digest. But the cancer is creating its own chemicals that destroy pancreatic enzymes. Battling cancer can overwork the pancreas, and if it is too weak to begin with, then, as Dr William Kelly states, “a pancreas that cannot metabolize protein cannot protect
The enzyme in the papaya leaf, papain, is a protein-eating enzyme like your pancreatic enzymes and can substitute for a weak pancreas if you have cancer or insure against cancer by digesting proteins from your food so that they do not become toxic, undigested food in your intestines.

Enzymes accelerate reactions within body cells. In the human body, the pancreas usually produces enzymes that break down foods into nutrients that the body can use for energy and other functions. Enzyme deficiencies are rare, but individuals who have cystic fibrosis or diseases of the pancreas may not produce enough natural enzymes to digest foods properly. Papain, an enzyme produced by the tropical fruit, papaya, is proteolytic, which means that it digests proteins. Frequently, papain is included in prescription combinations of digestive enzymes to replace what individuals with cystic fibrosis or pancreas conditions cannot produce naturally. Because it improves digestion in general, papain has also been used orally to treat less serious digestion disorders such as bloating and chronic indigestion. Since parasitic organisms are largely proteins, papain has sometimes been taken internally to eliminate intestinal worms, but this use is rare today.

In several studies of cancer patients, oral enzyme supplements containing papain helped to relieve treatment side effects such as mouth sores and difficulty swallowing. Chemicals in papain may increase immune system function and they may also promote the release of natural chemicals that attack tumor cells. Papain may lessen inflammation, as well. All of these potential effects may make papain-containing preparations useful as an addition to cancer therapy. An oral prescription product containing papain and other enzymes has orphan drug status in the United States for the treatment of multiple myeloma, a form of bone marrow cancer. An orphan drug has received approval from the U.S. Food and Drug Administration (FDA) because it shows effectiveness for treating severe or rare diseases that usually have few other treatment options.

In other research, papain and related enzymes have been studied for oral use in several conditions. Some evidence shows that they may help to prevent complications of diabetes, possibly by lessening protein deposits in the kidneys. Proteolytic enzymes such as papain may also decrease pain and inflammation associated with rheumatoid arthritis, improve healing of injuries, and reduce swelling after surgery. In Europe, papain is available as an ingredient in several non-prescription products that are sold for relieving inflamed and swollen respiratory tract tissue. General stimulation of immune response and decreases in inflammation are thought to be responsible for some of these observed effects, but other possible causes are not clear. Results of some studies are inconclusive, and more study is needed before papain can be recommended for these conditions.

Topically, papain has been used for skin conditions such as psoriasis. Its ability to break down proteins is used to remove dead tissue from burns, to help skin injuries heal, to remove warts, and to treat ringworm. Cold sores caused by Herpes zoster virus have been treated successfully with both oral and topical papain-containing products. In one small study of individuals with Herpes zoster, an oral papain product was as effective as a prescription antiviral medication in resolving pain, but not redness. A year-long observational study of more than 400 women found that those who ate papaya at least once a week were less likely to have chronic infections with human papilloma virus (HPV), a common sexually transmitted disease. In laboratory studies, topical application of papain has also shown some antibacterial properties, which may be due to papain’s
interference with an enzyme that certain bacteria produce. Further study is needed to prove or
disprove its possible antibacterial effects, however.

- http://www.drugdigest.org/DD/PrintablePages/herbMonograph/0,11475,552451,00.html

**Enzyme Therapy Inhibits Metastasis (Spread) of Cancer**

For about 30 years, a number of work groups have concerned themselves with the influence of
proteolytic enzymes on metastasis. In the 1960s, scientists were of the opinion that cancer cell
stickiness resulting from a deficiency in enzymes was responsible for the frequent development of
secondary tumors. This stickiness of the cancer cells was generally recognized to result from the
excessive formation of fibrin.

The close relationship between fibrin (protein) deposits and other types of invasive tissue growth and
metastasis is adequately described in international literature and is generally accepted. The
discovery of substances, known as adhesion molecules, provided important new impulses for
current scientific discussions.

Inflammation also plays a role in cancer spread. Since the endothelium of tissue with
inflammatory alterations has a thicker layer of specific adhesion molecules, these are sites where
metastasis are more likely to occur. The importance of chronic progress of inflammation in tumor
growth and metastasis has been demonstrated in studies which verify the influence of anti-
inflammatory therapy on inhibiting metastasis.

Formation of fibrin (protein) on the tumor cell membrane supports this adhesive process and
serves as a protective barrier against tumor cell recognition by the immunological system.

Proteolytic enzymes (like papain) inhibit both excess fibrin deposition and inflammation, thus
helping to prevent the spread of tumor cells.

Indeed, one of the most impressive features of clinical trials for patients with multiple myeloma,
breast, stomach, colon and pancreatic cancers, is prolongation of survival time. This may reflect
reduced tendency toward cancer spread.

- “Systemic Oral enzymes in Cancer Therapeutics” from the Doctor’s Prescription for Healthy
Living, Vol4 No6

Of the three thousand enzymes that scientists have named we need very specifically one that specializes in
eating away the fibrous coating (protein armor) around the cancer cell. These specialty enzymes are called
“proteolytic” – or “protein eating” enzymes. So far there are only two of the three thousand that qualify
for this job that are natural plants and fruits—papain (found in papaya leaves) and bromelain (found in the
core of the pineapple). I choose to promote papaya leaves in tea because this has the most cultural and
historical tradition for successful cancer treatment.

Refer to the comparison of some protein eating (proteolytic) enzymes below:

<table>
<thead>
<tr>
<th><strong>Proteolytic Enzymes:</strong> (B=Bromelain, P=Papain, T/C=Trypsin &amp; Chymotrypsin, SP=Serratia Peptidase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects:</td>
</tr>
<tr>
<td>Depletion of kininogen</td>
</tr>
<tr>
<td>Inhibiting release of bradykinin</td>
</tr>
<tr>
<td>Inhibiting release of histamine</td>
</tr>
<tr>
<td><strong>Promotion of fibrinolysis</strong></td>
</tr>
<tr>
<td>Alpha-macroglobulin binding</td>
</tr>
<tr>
<td>Reduct in inflammatory cytokines</td>
</tr>
<tr>
<td>Modulation of prostaglandins</td>
</tr>
</tbody>
</table>
One other common objection to the enzyme action in papaya tea is that conventional science says that enzymes “die” at 114°F (degrees fahrenheit). The fascination related to papain is that it breaks the rules related to temperature and activity, very specifically in the presence of water. As below, papain “denatures” at 160°F, hydrolyzes to the water, and re-natures when it cools. Most optimum activity is at 150°F, a perfect tea.

Papain exhibits characteristics at one end of a spectrum of chemical behavior with actinidin (EC 3.4.22.14) at the other. Caricain [papaya (Carica papaya) proteinase Ω, EC 3.4.22.30] and ficin (EC 3.4.22.3) each exhibit behavior intermediate between these extremes.

“Temperature-dependences of the kinetics of reactions of papain and actinidin with a series of reactivity probes differing in key molecular recognition features”
Sheraz Gul, Geoffrey W. Mellor, Emrys W. Thomas, and Keith Brocklehurst

An important observation in relation to various manipulations in the application of this immunoglobulin was that the denaturation method did not affect the different transitions in the same way. The transition at 61°C appeared to be most sensitive to heat treatment and adsorption onto a hydrophobic surface, whereas the peak at 71°C [160°F] was most sensitive to decreasing pH. It was suggested that the transitions at 61°C and 71°C represent the F<sub>ab</sub> and F<sub>c</sub> fragments, respectively.

“The Unfolding/Denaturation of Immunoglobulin of Isotype 2b and its Fab and Fc Fragments
Arnoldus W. P. Vermeer, Willem Norde, and Aar van Amerongen

“To trigger proteolytic action, the...enzymes should be preheated to a temperature conducive for hydrolytic activity of the enzymes, generally within a range of about 140 degree. to about 150 degree. F. A temperature of about 140 degree. F. is optimal for endogenous proteolytic enzymes whereas a temperature of about 150 degree. F. is optimal for extraneous enzymes such as papain.”

-Particulate proteinaceous product containing non-heat-denatured animal protein
Document Type and Number: United States Patent 5162129

A very practical angle to show that enzymes survive cooking temperatures and still continue to work is shown in the kitchen. Papain is used as a meat tenderizer and continues to tenderize after cooking. Below the action—action process played out.

Papain breaks down meat and is best known as a commercially-prepared tenderising cooking ingredient. It is important to thoroughly cook treated meat to inactivate the enzyme, which is heat resistant. If treated meat is stored after cooking (say, as a leftover or because it was cooked a long time before serving) the tenderising action may continue and the meat will digest to an unpleasant texture.

- http://www.bbc.co.uk/dna/h2g2/A9913809
FOURTH

I want to talk about the whole enzyme business. Hard to believe, but in 1911, Dr Beard proved that enzymes cure cancer, and then wrote the book, “The Enzyme Treatment of Cancer and its Scientific Basis”. Other doctors scoffed at him, but later doctors got desperate when their patients got desperate. The former “mocker” doctors, out of being pressured by their dying patients, finally decided to try enzymes. The enzymes that Dr. Beard used were taken out of a pig intestine. This is what the other doctors tried. One huge difference, however, was that these doctors didn’t do it how Beard did. Beard removed the enzymes from a young pig, and injected them right away into his patients. The other doctors took old pigs (whose enzymes were failing) and also did not inject them straight on while they were fresh. Because of this, the other doctor’s patients did not see good results. From these errors, Our beloved scientist, Dr. Beard, was viewed as a quack. History folded, however, to his honor.

Another story about a Canadian doctor who injected enzymes into the backs of patients with slipped discs. This seemed to miraculously heal them. The doctor went to a drug company and offered his idea. The drug company mixed enzymes with to her chemicals to make a pill and performed a “clinical” study which “disproved” the theory. The Canadian doctor was then labeled a quack. Seems strange that patients kept coming to him and were healed. Seems so strange and ironic that the ONLY current FDA-approved enzyme use today is this exact method of cure from this Canadian doctor. History folded again.

The other story that made me mad enough to write this book is the story of the well-known Hope Clinic. Dr. Ernesto Contreras, Sr. started this clinic for cancer victims that the rest of the medical world had given up on, to endure years of being called a quack and every other possible name based on his philosophy of “whole” healing, the spirit, mind and body. This doctor showed with persistence that healing cancer is not about just killing a tumor. The doctor was also a believer in enzyme therapy. But the part of the story that gets me is that late in his career, after surviving years of ridicule, he had an interesting patient come to his clinic. The late Dr. Contreras’s son told this story:

“...Just a couple of years ago, a renowned oncologist came to visit my father. He explained that he had cancer and was looking for someone to treat him. My father asked him, “Why not take the chemotherapy that you have prescribed to your patients over the past 30 years?” The doctor responded, “But this is me we are talking about Ernesto!” This cancer specialist’s experience treating thousands of cancer patients had taught him that chemotherapy alone was not going to cure him. He came to my father looking for an integrative approach.”

His son had the following to say about enzyme therapy:

Proteases (proteolytic enzymes), one of the three main categories of digestive enzymes, are found in the stomach juices, pancreatic juices, and intestinal juices. Proteolytic enzymes help to digest proteins. Plant extracts with a high content of proteolytic enzymes have been used for years in traditional medicine. Besides proteolytic enzymes from plants, such as papain and bromelain obtained from papayas and pineapples respectively, “modern” enzyme therapy additionally includes proteolytic pancreatic enzymes, such as chymotrypsin, tripsin, pepsin and pancreatin. Proteolytic enzymes are used primarily to aid digestion and absorption of proteins contained in food. In addition to aiding digestion, proteolytic enzymes have analgesic, anti-inflammatory, antithrombotic, fibrinolytic, immune modulating, and edema-reducing properties. Results from recent research studies showed that proteolytic enzymes can produce great benefits in cancer therapy by improving the quality of life, reducing both the signs and symptoms of the disease and the adverse effects caused by radiotherapy and chemotherapy, and prolonging the survival time. “Proteolytic enzymes act as immuno-modulators by raising the impaired immuno-cytotoxicity of leukocytes against tumor cells from patients and by inducing the production of distinct
cytokines such as tumor necrosis factor, interleukin (IL)-1, IL-6 and IL-8. There are reports on animal experiments claiming an anti-metastatic efficacy of proteolytic enzymes associated with inhibition of growth and invasiveness of tumor cells. All these antitumoral activities do not depend on the proteolytic activity of enzymes, but on their effects on the modulation of immune functions, including the anti-inflammatory activities and their potential to accelerate wound healing. Proteolytic enzymes are also used in the treatment of pancreatic insufficiency, cystic fibrosis, digestive problems, viral infections, surgical traumas, auto-immune disorders and sports injuries. Enzyme therapy can significantly clear “immune complexes” (combinations of antibodies and antigens) from the body. When the body is incapable of releasing these immune complexes, an inflammatory process begins that can lead to serious disease, often of the autoimmune type. Dramatic results have been reported with the use of enzyme therapy in such diseases as rheumatoid arthritis, multiple-sclerosis, and systemic lupus erythematosus.

- “Dismantling Cancer” by Francisco Contreras, MD, Jorge Barroso-Aranda, M.D., Ph.D., and Daniel E. Kennedy, Published by Interpacific Press

After I was informed, I really needed to understand why my mother’s doctors didn’t recommend enzymes. If the information, the science, the clinical studies are all there, what is wrong with these doctors? What I learned was that we need to give them a bit of a break…at least the ones in America who are 45 years and older. See, the textbooks that they studied in Med school told them that enzymes are great for digestion, but they cannot make it through the intestinal wall—they are too BIG. For this reason, ORAL enzyme therapy (enzymes taken by mouth) could not work. It was only in the last twenty-five years that scientists PROVED this to be incorrect. Now we have a new problem/challenge. The FDA has not yet approved oral enzymes for cancer therapy. Doctors in America can’t recommend or prescribe what is not FDA approved. European doctors can, however, and they do now. The drug companies, though, won’t be interested to pay for clinical studies unless there is money in it….and one can’t PATENT a leaf. These guys with the patent-pending are going to have to add gel filtration and some other item before it would be possibly patentable.

So then, armed with this information and inexplicably excited, one Saturday at my business I cornered a customer who happened to be a doctor. I asked him his credentials, and I really smiled when he said that he was on some fancy homeopathic board of directors…I don’t remember the detail…but I drug the guy into my office, shut the door, and just asked him. “So,” I said, “Do you know of papain?” “Yes”, He said, “That is the protein eating enzyme”. “What is the chance that the enzyme papain can treat cancer?” “HORSESHIT!”, he said. Trying to remain calm, I said, “Why?” He said, “The enzymes won’t make it past your stomach!” I smiled. Information science had paid off. I mentioned how scientists have proven now that enzymes can make it past your stomach and through the intestinal wall. He didn’t make it out of my office until an hour later. At that point he was asking me to please e-mail him all of my data.
What cultural relevance does papaya leaf tea have? The fact that many cultures use this tea for a cancer cure is not proof, but only lends trust. Validating natural cures and discovery of natural cures by researching ethnomedicine is not unusual:

“In this review we describe and discuss several approaches to selecting higher plants as candidates for drug development with the greatest possibility of success. We emphasize the role of information derived from various systems of traditional medicine (ethnomedicine) and its utility for drug discovery purposes. We have identified 122 compounds of defined structure, obtained from only 94 species of plants, that are used globally as drugs and demonstrate that 80% of these have had an ethnomedical use identical or related to the current use of the active elements of the plant. We identify and discuss advantages and disadvantages of using plants as starting points for drug development, specifically those used in traditional medicine.”

“Fossil records date human use of plants as medicines at least to the Middle Paleolithic age some 60,000 years ago (1). From that point the development of traditional medical systems incorporating plants as a means of therapy can be traced back only as far as recorded documents of their likeness. However, the value of these systems is much more than a significant anthropologic or archeologic fact. Their value is as a methodology of medicinal agents, which, according to the World Health Organization (WHO), almost 65% of the world’s population…”

Table 1. Drugs derived from plants, with their ethnomedical correlations and sources.

<table>
<thead>
<tr>
<th>Drug Action or clinical use</th>
<th>Plant source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetyldigoxin Cardiotonic</td>
<td>Digitalis lanata Ehrh.</td>
</tr>
<tr>
<td>Adoniside Cardiotoxic</td>
<td>Adonis vernalis L.</td>
</tr>
<tr>
<td>Aescin Anti-inflammatory</td>
<td>Aesculus hippocastanum L.</td>
</tr>
<tr>
<td>Aesculetin Antidysentery</td>
<td>Fraxinus rhynchophylla Hance</td>
</tr>
<tr>
<td>Agrimoprol Anthelmintic</td>
<td>Agrimonia eupatoria L.</td>
</tr>
<tr>
<td>Ajmalicine Circulatory disorders</td>
<td>Rauvolfia serpentina (L.) Benth ex. Kurz</td>
</tr>
<tr>
<td>Allyl isoioctyranate Rubefacient</td>
<td>Brassica nigra (L.) Koch</td>
</tr>
<tr>
<td>Andrographolide Bacillary dysentery</td>
<td>Andrographis paniculata Nees</td>
</tr>
<tr>
<td>Anisodamine Anticholinergic</td>
<td>Anisodus tanguticus (Maxim.) Pascher</td>
</tr>
<tr>
<td>Anisodine Anticholinergic</td>
<td>Anisodus tanguticus (Maxim.) Pascher</td>
</tr>
<tr>
<td>Arecoline Anthelmintic</td>
<td>Areca catechu L.</td>
</tr>
<tr>
<td>Asiaticoside Vulnerary</td>
<td>Centella asiatica (L.) Urban</td>
</tr>
<tr>
<td>Atropine Anticholinergic</td>
<td>Atropa belladonna L.</td>
</tr>
<tr>
<td>Berberine Bacillary dysentery</td>
<td>Berberis vulgaris L.</td>
</tr>
<tr>
<td>Bergenin Antitussive</td>
<td>Ardisia japonica Bl.</td>
</tr>
<tr>
<td>Bromelain Anti-inflammatory, proteolytic agent</td>
<td>Ananas comosus (L.) Merrill</td>
</tr>
<tr>
<td>Caffeine CNS stimulant</td>
<td>Camellia sinensis (L.) Kuntze</td>
</tr>
<tr>
<td>(+)-Catechin Haemostatic</td>
<td>Potentilla fragaroides L.</td>
</tr>
<tr>
<td>Chymopapain Proteolytic, mucolytic</td>
<td>Carica papaya L.</td>
</tr>
<tr>
<td>Cocaine Local anaesthetic</td>
<td>Erythroxylum coca Lamk.</td>
</tr>
<tr>
<td>Codeine Analgesic, antitussive</td>
<td>Papaver somniferum L.</td>
</tr>
<tr>
<td>Colchicine Antitumor agent; antitumor</td>
<td>Colchicum autumnale L.</td>
</tr>
<tr>
<td>Convallotoxin Cardiotoxic</td>
<td>Convallaria majalis L.</td>
</tr>
<tr>
<td>Curcumin Choleretic</td>
<td>Curcuma longa L.</td>
</tr>
<tr>
<td>Cynarin Choleretic</td>
<td>Cynara scolymus L.</td>
</tr>
</tbody>
</table>

(more….)
The Value of Plants Used in Traditional Medicine for Drug Discovery
Daniel S. Fabricant and Norman R. Farnsworth
Program for Collaborative Research in the Pharmaceutical Sciences, College of Pharmacy,
University of Illinois-Chicago, Chicago, Illinois, USA

Of the long list of plants that had traditional use in ethnomedicine is chymopapain [derived from papaya leaves], for use as a mucolytic (A mucolytic agent is any agent which dissolves thick mucus usually used to help relive respiratory difficulties.) and as a proteolytic (Proteolysis is the directed degradation (digestion) of proteins by cellular enzymes called proteases or by intramolecular digestion. ...). It is in this function (proteolysis) that papaya leaves attack cancer’s armor by digesting the protein “fibrous” coating on the cancer cell.

An interesting clinical study was performed to discover what percentage of cancer patients around the world used alternative therapies, what therapies were used, and what the effect was overall. My first eyebrow raised when I saw papaya tea in the list of the regular complementary and alternative therapies (CAM) in fourteen countries…

“Use of complementary and alternative medicine in cancer patients: a European survey”


1 School of Nursing, University of Manchester, Manchester, UK; 2 Institut Català Oncologia ICO, Barcelona, Spain; 3 Faculty of Social Welfare and Health Studies, University of Haifa, Haifa, Israel; 4 Gazi University Hospital, Ankara, Turkey; 5 Department of Nursing and Midwifery, University of Stirling, Stirling, UK; 6 Greek Oncology Nursing Society and Ag. Anargiri Hospital, Athens, Greece; 7 Zurich University Hospital, Poliklinik Onkologie, Zurich, Switzerland; 8 Sahlgrenska University Hospital, Gothenburg, Sweden; 9 Università degli Studi di Milano-Istituto Nazionale Tumori, Milan, Italy; 10 Masaryk Memorial Cancer Institute, Brno, Czech Republic; 11 Oncology Department, Aarhus University Hospital, Aarhus, Denmark; 12 Department of Education, Institute for Oncology and Radiology, Belgrade, Serbia and Montenegro; 13 Belgian Society of Oncology Nursing, Brussels, Belgium; 14 Department of Oncology, Lanspitali, Reykjavik, Iceland; 15 Department of Oncology, City Hospital, Nottingham, UK; 16 School of Health Sciences, Koc University, Istanbul, Turkey; 17 Greek Oncology Nursing Society and Department of Nursing, University of Athens, Athens, Greece
SIXTH

Blame the FDA. Isn’t it their job to give us information about what is healthy? This was my first reaction.

Now I’ve thought about it. No, I don’t think that it is the job of the FDA. Has the FDA approved apples? What about all of those other things that cancer patients are told to eat….like eleven servings of uncooked vegetables per day. Is this FDA approved? Last time you got sick with a cold and went to the doctor to get an antibiotic did he tell you that you need to drink more water, eat four servings of fruit and eleven servings of fresh vegetables per day and you won’t get so many colds? Last year I took my son in to the doctor to get an antibiotic for what seemed to be an upper-respiratory infection. The doctor said that he’d prefer not to give my son an antibiotic. So I asked him what he was going to give him. The doc said, “nothing. Antibiotics are being over-prescribed”. I went home feeling strange. But I can’t change very easily my “gimme something to fix it” attitude, knowing that I caused the problem in the first place by eating wrong.

This describes well my whole attitude about cancer. Anti-oxidant this…free radical that….carcinogen monsters everywhere. I gave up. Why even try when “experts” say that we can get cancer from the shower water through our skin? What I think of when I say “cancer cure” is exactly that. I want a fixer, not just another "helper-preventer”.

From the article “Nutrition and Cancer: A review of the evidence for an anti-cancer diet”, Michael S. Donaldson:

Enzymes, especially proteases, if they reach systemic circulation, can have direct anti-tumor activity. Wald et al reported on the anti-metastatic effect of enzyme supplements. Mice inoculated with the Lewis lung carcinoma were treated with a proteolytic enzyme supplement, given rectally (to avoid digestion). The primary tumor was cut out, so that the metastatic spread of the cancer could be measured. After surgical removal of the primary tumor (day 0), 90% of the control mice died by day 18 due to metastasized tumors. In the first group, which received the rectal enzyme supplement from the time of the tumor-removal surgery, 30% of the mice had died from metastasized cancer by day 25. In the second group, which received the enzymes from 6 days prior to removal of the primary tumor, only 10% of the animals showed the metastatic process by day 15. In the third group, which received the enzyme treatment since the initial inoculation of the Lewis lung carcinoma, no metastatic spread of the tumor was discernible. One hundred day-survival rates for the control, first, second, and third groups were 0, 60%, 90%, and 100%


In a similar experiment, an enzyme mixture of papain, trypsin, and chymotrypsin, as used in the preparation Wobe-Mugos E, was rectally given to mice that were inoculated with melanoma cells. Survival time was prolonged in the test group (38 days in the enzyme group compared to 24 days in the control mice) and 3 of the 10 enzyme-supplemented mice were cured. Again, a strong anti-metastatic effect of the proteolytic enzymes was seen.

If we relate the studies of mice to how it would compare to humans it might look like this: The first set was given enzymes at stage 4 cancer after tumor removal. The second set was given enzymes at the onset of cancer. The third set was given enzymes prior to cancer. Mice who represent people with stage four cancer survived by 30%. Mice who represent people given enzymes at onset of cancer discovery survived at 60%. Mice who represent people who incorporate enzymes into a life pattern survived cancer at 100%.

Science supports the function of papain:

**Physical Properties and Kinetics**

Papain is a cysteine protease of the peptidase C1 family. Papain consists of a single polypeptide chain with three disulfide bridges and a sulfhydryl group necessary for activity of the enzyme.

- **Molecular weight**: 23,406 Da (amino acid sequence)
- **Optimal pH for activity**: 6.0-7.0
- **Temperature Optimum for Activity**: 65 °C
- **pI**: 8.75; 9.55
- **Spectral properties**:
  - $\lambda_{\text{max}}$: 278 nm
  - Extinction coefficient, $E^{1\%}_{1\%}$: 25
  - Extinction coefficient, $E_{\text{M}}$: 57.6 (at 280 nm)
- **Unit Definition**: One unit will hydrolyze 1.0 µmole of N-α-benzoyl-L-arginine ethyl ester (BAEE) per minute at pH 6.2 at 25 °C.

**Specificity**

Papain will digest most protein substrates more extensively than the pancreatic proteases. Papain exhibits broad specificity, cleaving peptide bonds of basic amino acids, leucine, or glycine. It also hydrolyzes esters and amides. Papain exhibits a preference for an amino acid bearing a large hydrophobic side chain at the P2 position. It does not accept Val at the P1' position. [1]

According to the study above, papain is more powerful than our natural pancreatic proteases.

Maybe papaya leaves should be put in our water instead of flouride.

"In point of fact, fluoride causes more human cancer death, and causes it faster than any other chemical." -- Dean Burk -- Congressional Record 21 July 1976

"I know of absolutely no, and I mean absolutely no means of prevention that would save so many lives as simply to stop fluoridation, or don't start it where it is otherwise going to be started. There you might save 30,000 or 40,000 or 50,000 lives a year, cancer lives. That is an awful lot of lives a year."

- Dr. Dean Burk Ph.D. (34 years at the National Cancer Institute). Judicial hearing, January 14, 1982. Safe Water Foundation vs. City of Houston, District Court of Texas, Harris County, 151st Judicial District, 80-52271

http://www.rvi.net/~fluoride/000045.htm

A clinical study in 2001 was performed on 2,339 breast cancer patients. The study was meant to determine the effect of oral enzymes (OE).

A clear reduction in the side effects of radiotherapy and chemotherapy was documented in 74% of the test group and 55% of the control group. Analysis of survival, recurrence, and metastasis demonstrated a reduced number of events in the test group. There was evidence of a beneficial
influence of OE on time to event, although the median observation time was too short in these breast cancer patients to draw definite conclusions. The safety component was judged in 98% of the test group and 76% of the control group as "very good" or "good". In the total sample of 2,339 patients, the rate of OE-associated adverse reactions was 3.2%. All side effects were mild to moderate gastrointestinal symptoms. Conclusion: Complementary treatment of breast cancer patients with OE improves the quality of life by reducing signs and symptoms of the disease and the side effects of adjuvant antineoplastic therapies. This epidemiological retrolective cohort analysis provides evidence that the patients may also gain benefit by a prolongation of the time to event for cancer recurrence, metastasis and survival. OE was generally well tolerated.

PMID: 11561873 [PubMed - indexed for MEDLINE]


Another clinical study in Slovak Republic with welcomed results:

PURPOSE: To evaluate the impact of an additive therapy with an oral enzyme (OE) preparation given for more than 6 months additionally to standard combination chemotherapy (vincristine/melphalan/cyclophosphamide/prednisone (VMCP)- or methylprednisolone/vincristine/CCNU/cyclophosphamide/melphalan (MOCCA)-regimen) in the primary treatment of patients with multiple myeloma stages I-III. METHODS: A cohort of 265 patients with multiple myeloma stages I-III was consecutively treated at our institution in two parallel groups (control group (n = 99): chemotherapy +/-OE for less than 6 months; OE-group (n = 166): chemotherapy + OE for more than 6 months). The median follow-up time in the stages I, II, and III for the OE-group was 61, 37, and 46.5 months, respectively; for the control group the respective values were 33, 51.5, and 31.5 months. The primary endpoint of the study was disease-specific survival. Secondary endpoints were response to therapy, duration of first response and side effects. The chosen method for evaluation was the technique of a retrolective cohort analysis with a concurrent control group. Survival analysis was performed by the Kaplan-Meier method and multivariate analysis was done with the Cox proportional hazards model. RESULTS: Significantly higher overall response rates and longer duration of remissions were observed in the OE-group. Primary responders showed a longer mean survival time than non-responders. Additive therapy with OE given for more than 6 months decreased the hazard of death for patients at all stages of disease by approximately 60%. Observation time was not long enough to estimate the median survival for patients at stages I and II; for stage III patients it was 47 months in the control group versus 83 months for the patients treated with OE (P = 0.0014) which means a 3-year gain of survival time. Significant prognostic factors for survival, in the Cox regression analysis, were stage of disease and therapy with OE. The OE-therapy was generally well tolerated (3.6% of patients with mild to moderate gastrointestinal symptoms). CONCLUSION: OEs represent a promising new additive therapy in multiple myeloma which will be further evaluated in a randomized phase III trial in the USA.

PMID: 11561871 [PubMed - indexed for MEDLINE]


“Retrolective cohort study of an additive therapy with an oral enzyme preparation in patients with multiple myeloma.”

Clinic of Haematology and Transfusion Medicine, University of Bratislava, Slovak Republic.
The last thing that my Mama asked for before she died of this brutal cancer was a hamburger. Sad that she had tried everything...the spinach, the oil, every antioxidant possibility. The real problem was that the FDA had approved a drug for her rheumatoid arthritis. Here’s the ultimate irony. This FDA approved drug was later proven to be a carcinogen and was pulled off the market. Now I’m reading that papain is a very viable combatant for inflammatory diseases, very specifically, rheumatoid arthritis. So from here I’m not all that concerned about an FDA approval. Back to the hamburger, I don’t know who can’t relate to my Mama. It is so hard to change our eating patterns, and we only have so long to enjoy life, so for this I am so happy to find a cure where my Mama could have won more life. Maybe your Mom or Dad can. Maybe you will.

Why not forget the tea and take the pill?

Papain is available at Walmart in a pill. The papain enzyme is drawn out of the papaya tree by slicing the trunk and draining out this milky substance. The substance is dried and then made into a pill. This purified enzyme is used in many commercial applications. For instance, 80% of beer is clarified with papain. Papain is also popular as a meat tenderizer. Papain is used to produce chewing gum. Oral enzymes in pill form have proven effectiveness in clinical studies.

The stories and cultures showing cancer healing from the leaf tea remind me of the Dr. Beard situation—yes, it is papain that is the active enzyme in the leaf, but there is more. The reason that I personally believe in using tea from the natural leaf is there is more to the leaf than papain. Some other very powerful accompanying vitamins occur; Beta Carotene, Vitamin E, Potassium, etc. Our diet seems to lack the quantity of these vitamins that we need anyway. The mystery of how enzymes work shows some clues that certain puzzle pieces are needed for the greatest effectiveness, (such as vitamins), and other items can slow down or stop enzyme functionality (such as sugar and alcohol).

...and from Burk’s english interpretation of Warburg’s famous work, “The Prime Cause and Prevention of Cancer”, 1966..

"...Indeed millions of experiments in man, through the effectiveness of some vitamins, have shown, that cell respiration is impaired if the active groups of the respiratory enzymes are removed from the food; and that cell respiration is repaired at once, if these groups are added again to the food. No way can be imagined that is scientifically better founded to prevent and cure a disease, the prime cause of which is an impaired respiration."

"...Therefore we propose first to remove all compact tumors, which are the anaerobic foci of the metastasis. Then the active group should be added to the food, in the greatest possible amount, for many years, even for ever. This is a promising task. If it succeeds, then cancer will be a harmless disease."

"...Moreover, we discovered recently a) in experiments with growing cancer cells in vitro that very low concentrations of some selected active groups inhibit fermentation and the growth of cancer cells completely, in the course of a few days. From these experiments it may be concluded that de-differentiated cells die if one tries to normalize their metabolism. It is a result that is
unexpected and that encourages the task of inhibiting the growth of metastases with active enzyme groups."

"...It has been asked after the Lindau lecture why the repair of respiration by the active groups of the enzymes was proposed as late as 1966, although the fermentation of the cancer cell was discovered as early as 1923. Why was so much time lost?"

"...He who asked this questions ignored that in 1923 the chemical mechanism of enzyme action was still a secret of living nature alone. I The first active group of an enzyme, "Iron, the Oxygen-Transferring Part of the Respiratory Enzyme" was discovered in 1942. There followed in two decades the discoveries of the O2-transferring metalloproteins, the flavoproteins and the pyridinproteins, a period that was concluded by the "Heavy Metals as Prosthetic Groups of Enzymes" 3 and by the "Hydrogen Transferring Enzymes" 4 in 1947 to 1949."

Cancer, above all other diseases, has countless secondary causes. But, even for cancer, there is only one prime cause. Summarized in a few words, the prime cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar. All normal body cells meet their energy needs by respiration of oxygen, whereas cancer cells meet their energy needs in great part by fermentation.

**Why does cancer result if oxygen-respiration is replaced by fermentation?**

The early history of life on our planet indicates that life existed on earth before the earth's atmosphere contained free oxygen gas. The living cells must therefore have been fermenting cells then, and, as fossils show, they were undifferentiated single cells. Only when free oxygen appeared in the atmosphere - some billion years ago - did the higher development of life set in, to produce the plant and animal kingdoms from the fermenting, undifferentiated single cells. What the philosophers of life have called "Evolution créatrice" has been and is therefore the work of oxygen.

The reverse process, the dedifferentiation of life, takes place today in greatest amount before our eyes in cancer development.

I would like to go further and propose always making dietary additions of large amounts of the active groups of the respiratory enzymes after successful operations when there is danger from metastatic growths. One could indeed never succeed in redifferentiating the dedifferentiated cancer cells, since during the short duration of human life the probability of such a back-differentiation is zero. But one might increase the respiration of growing metastases, and thereby inhibit their fermentation, and - on the basis of the curve of DEAN BURK and MARK WOODS obtained with the Morris hepatomas - thereby inhibit the growth of metastases to such an extent that they might become as harmless as the so-called "sleeping" cancer cells in the prostates of elderly men.

..the active groups of respiratory enzymes, for example: iron salts, riboflavin, nicotinamide, and pantothenic acid.

"...But nobody today can say that one does not know what cancer and its prime cause be. On the contrary, there is no disease whose prime cause is better known, so that today ignorance is no longer an excuse that one cannot do more about prevention. That prevention of cancer will come there is no doubt, for man wishes to survive. But how long prevention will be avoided depends on how long the prophets of agnosticism will succeed in inhibiting the application of scientific knowledge in the cancer field. In the meantime, millions of men and women must die of cancer unnecessarily."

-Dr Otto Warburg, interpreted into English by Dr. Dean Burk, “The Prime Cause and Prevention of Cancer”, 1966
As powerful as papain can be alone, at least one of the powerful oxidizing enzymes, riboflavin is provided in the papaya leaves.

Per 100 g, the leaves are reported to contain 74 calories, 77.5 g H2O, 7.0 g protein, 2.0 g fat, 11.3 g total carbohydrates, 8 g fiber, 2.2 g ash, 344 mg Ca, 142 mg P, 0.8 mg Fe, 16 mg Na, 652 mg K, 11.565 mg beta-carotene equivalent, 0.09 mg thiamine, 0.48 mg riboflavin, 2.1 mg niacin, and 140 mg ascorbic acid, as well 136 mg vitamin E. Leaves contain the glycoside, carposide, and the alkaloid, carpaine. Fresh leaf latex contains 75% water, 4.5% caoutchouc-like substances, 7% pectinous matter and salts, 0.44% malic acid, 5.3 papain, 2.4% fat, and 2.9% resin.

“Some of Papaya Leaf’s constituents include the fermenting agent myrosin, alkaloids, rutin, resin, tannins, carpaine, dehydrocarpaines, pseudocarpaine, flavonols, benzylglucosinolate, linalool, malic acid, methyl salicylate, another enzyme, chymopapain (latex and exudate), calcium, iron, magnesium, manganese, phosphorus, potassium, zinc, beta-carotene, B-vitamins and vitamins A, C and E”.

-“Papaya Leaf”, by Stacy Chillemi

Papaya leaf tea can cut the armor of the cancer cell and allow your body to kill the cancer. But I believe that Dr. Burk and Warbug have identified the truth obvious, that we know what causes cancer. Cancer, the doctors say, is the natural state of cells. It is the work of oxygen to cells that creates life. The work to get oxygen to cells before they begin to ferment (eating properly) and destroy cells that are fermenting. We can start the battle to destroy cancerous and pre-cancerous cells with papaya leaf tea, and oxygenate cells by eating eleven servings of fresh vegetables and four servings of fruit per day, with a little bit of fresh air and exercise.

Virtually all chronic degenerative diseases are caused or aggravated by digestive problems. After the most extensive study on nutrition ever undertaken by the government, the U.S. Senate Select Committee on Nutrition and Human Needs concluded in its 1978 report entitled "Diet and Killer Diseases," that the average American diet is responsible for the development of chronic degenerative diseases such as heart disease, atherosclerosis, cancer, diabetes, stroke, etc. Many of the most common health complaints revolve around a 20-foot, mucus-lined tube that directly interfaces us with our environment. This is no mystery: This is the gastro-intestinal tract, affectionately abbreviated "GI." The job of the GI is to alchemically transmute the food we eat into our flesh, blood, actions, thoughts and feelings... with a little help from our friends the salivary glands, the pancreas, the liver, and most importantly RAW FOOD -- all of which provide (now we're getting to the point) ENZYMES.

- Enzymes: The Difference Between Raw and Cooked Foods by Emily Kane, N.D.

Malnutrition is the basis of all disease: "Man's body is a living organism, made of living cells, which require living food in order to be properly nourished and function well. When we put cooked food into our body, loaded with contaminants, the body starts to break down. It begins in the very young with colic, rashes, colds, earaches, upset stomachs, swollen glands and tonsils. As the child grows older, their may be tooth decay, pimples, the need for eye glasses, etc. Then as we enter adult life there is arthritis, hypoglycemia, heart attacks, strokes, diabetes and cancers. All this and a multitude of other diseases are unnecessary and are nothing but the result of improper diet and lifestyle! Today, most people accept cooked food as the normal means of supplying the body with nutrients, not realizing that the living cells of our bodies do not take nourishment from the dead and artificial ingredients found in cooked food. And so, after a typical meal of cooked meat, cooked potatoes, a cooked vegetable and a piece of cooked bread, followed by a cooked sugar desert, their stomach is full and they think they have satisfied the nutritional needs of their body. In reality, they have given their body practically no nourishment. And thus with a full stomach, they are slowly starving their body's cells."

- Raw Food by Rev. George H. Malkmus
There are two kinds of starvation: One starvation comes about because of no food at all. The second and most insidious starvation is progressive malnutrition over a period of time. The people in the third world don't have enough volume of food. In the first world there is plenty of "food" but it's empty food. The food we eat produces plenty of calories and energy but is almost completely devoid of nutrition which is vital to our survival. A good diet promotes good health and prevents the onset of disease.

Most human illnesses and diseases are due to a deficiency of vital nutrients. When you supply your body with the proper nutrients, in a form that your body can use, it knows how to repair itself. "The body has the inherent ability -the vitality -not only to heal itself and restore health, but also to ward off disease. Illness is not caused simply by an invasion of external agents or germs, but is a manifestation of the organism's attempt to defend and heal itself. Prevention Is the Best Cure. Health is a reflection of how we choose to live." TC Fry
WHAT ELSE THE LEAF CAN DO

Truly the most difficult task in doing research on the use of papaya leaves around the world is that the leaves (and other parts of the fruit) have so much varied medicinal use that it is easy to get distracted. If, in fact, there might be one reason that the leaf is not well-known for its cancer-fighting properties is because of the many incredible medicinal properties this leaf has.

The papain enzyme is effective against inflammatory diseases such as arthritis. The best teacher that I found on the subject explained it this way:

“Proteolytic enzymes, also referred to as "proteases," are enzymes that break down proteins into their smallest elements. If this breakdown of proteins happens in your gut, we call the enzymes "digestive," because they help us digest our food. Systemic proteolytic enzymes, however, have a completely different purpose, so please don't confuse the two.

When taken on an empty stomach, proteolytic enzymes will pass through the stomach or intestine lining and enter the circulatory system. This is why they are called "systemic"—once they enter the circulatory system, they circulate throughout the body.

Why are systemic proteolytic enzymes important?
The most important thing that systemic proteolytic enzymes do is to break down excess fibrin in your circulatory system and in other connective tissue, such as your muscles. These enzymes bring nutrients and oxygen-rich blood that remove the metabolic waste produced by inflammation and excess fibrin.

For example, if you have an injury or are recovering from a painful condition of any kind and your blood flow is restricted, you will have a longer recovery process. In addition, the exchange of nutrients and oxygen in your body will be limited, and there will be an will have a longer recovery but an increase in pain and inflammation.

I searched long and hard to find this incredible image (left) of red blood cells caught in a web of excess fibrin. The fibrin is causing a physical restriction of blood flow. If you look closely, you can see that the cells are actually stuck. Ultimately, those red blood cells cannot get into the capillaries to oxygenate and nourish your muscles and remove the metabolic waste that is causing your pain.

One more important thing to understand: Whenever you're recovering from a muscle irritation, injury, or surgery, the body uses fibrin to help heal itself. This is normal and healthy. The only problem is that with poor blood flow and a lack of enzyme activity, that fibrin will start to accumulate. If the area in question is slow to heal, an excess of fibrin will appear as clumps of scar tissue in the muscle or at the surgical site. Once this happens, your acute condition becomes chronic.

Now that you know that excess fibrin throughout your circulatory system will severely limit the amount of blood flow to areas that need it the most, you may be wondering how the body tries to compensate for this restriction. The answer is simple: by forcing the heart to work harder and increasing your blood pressure.

How do you know if you have too much fibrin?
As I have noted, the body will do what it needs to do to keep us alive—sometimes at great cost to your overall health. Some possible indicators of excess fibrin in your system include: chronic fatigue, slow healing, inflammation and pain, and elevated blood pressure. There is also a medical test to measure something called "blood monomers."

The dangers of too much fibrin...
The medical community has long known that excess fibrin presents a cardiac and stroke risk. Finally, they have acknowledged a link between excess fibrin and chronic systemic inflammation, the true root cause of virtually every disease and painful condition known to man.
Which conditions do proteolytic enzymes help and how?
The list below is only a sample of the types of conditions that can be addressed with systemic proteolytic enzymes. If you are still wondering how one little substance can support all of these conditions, remember that they all have one thing in common—excess fibrin, which causes a reduction in blood flow:

Arthritis, Herniated Disc, Atherosclerosis, Hyper-coagulation, Back Pain, Sciatica, Chronic Fatigue, Spinal Stenosis, Chronic Pain, Strains and Sprains, Fibrocystic Breast, Post-operative Scar Tissue, Fibromyalgia, Traumatic Inflammation, High Blood Pressure, and Uterine Fibroids

Which would you rather take—a pain killer or a healing enzyme?
Truth is, very few pain killers help heal the body, and in most cases the side effects are rather unpleasant. On the other hand, systemic proteolytic enzymes support the body’s ability to heal itself, and they reduce the signs and symptoms of a chronic condition.

Can proteolytic enzymes be used with other pain meds?
I knew you were going to ask. Yes, enzymes can used if you are taking low-dose non-steroidal anti-inflammatory drugs (NSAIDs), as long as they are taken 60 minutes apart.

How about clinical research?
Where is the proof? There are untold numbers of clinical studies that have been done on proteolytic enzymes, and we have 76 of the most relevant studies listed on our site. Let’s not forget that these enzymes have been in use in Europe for more than 50 years. And in Japan, some proteolytic enzymes are classified as prescription drugs.

Where do proteolytic enzymes come from?
Some are animal-bases, some are plant-based—such as Bromelain and Papain—and some are fungus-based, such as Serrazimes®.

Which types are best and why?
I recommend plant- and fungus-based enzymes because they tolerate the gastric environment better, so more of the enzymes make their way into the circulatory system.

How long does it take to start to work?
Enzymes go to work immediately. The big difference between enzymes and vitamins is the way they are measured. Enzymes are not measured by weight; they are measured in Units of Fibrolytic Activity, which means how much fibrin they break down in a set amount of time. The questions you really want answered are: "How long will it take to get pain relief and reduce my inflammation?" and "How fast will my healing happen?" Truth is, there is no simple answer because the healing process and outcome will be different for everyone. There are a number of factors that bear on how fast the enzymes will work for you, including dosage, quality of sleep, diet, and physical activity. Even the very treatments you are undergoing to try to get better could be holding you back.

Are proteolytic enzymes safe for continued use?
Yes, proteolytic enzymes should be considered safe for continued use. There are three suggested usage protocols: one is a rotation of 12 weeks on and 4 weeks off; two is to take them continuously; and three is to take them on as-needed basis.

Who should not take proteolytic enzymes?
- Individuals taking prescription blood thinners (Coumadin, Heparin, Plavix)
- Anyone who will be having surgery in less than two weeks
- Individuals with known ulcers of the stomach
- Individuals with Gastroesophageal Reflux Disease. (GERD)
- Pregnant or lactating women
• Individuals currently taking antibiotics
• Individuals with an allergic reaction to pineapples or papayas

Are there any side effects?
Proteolytic enzymes have an excellent safety record, with no significant side effects reported. With any supplement, however, there is always the risk of developing an allergy to one or more ingredients. If this happens, you should discontinue use.

Choosing to try systemic proteolytic enzymes.
Remember, the enzymes are supporting the healing process, so recovery from any condition is going to take time. You don’t just take the enzymes and expect to get better immediately. By using these enzymes as part of a well-planned recovery process, you’re making a commitment to doing what it takes to make improvements in your life.”

One of the largest killers of children in the world is malaria. When I read about how papaya leaf treats and helps prevent malaria I felt so truly drained of what blood I have in my body. The irony is that these places where malaria is a problem are also climates where papaya often grow. How could we miss this? Why can’t we do something with this information? It isn’t as if we have to send the medicine from other countries… it’s right there! What is our problem?

Abstract:
The comparative efficacy of sulfadoxine-pyrimethamine (Maloxine) and leaf extracts of Mangifera indica (mango) and Carica papaya (paw-paw) was investigated in Plasmodium berghei-infected mice. Maloxine had the highest efficacy, reducing the parasite count from an average count of 9.4±0.04 to 1.4±0.05 after six days of treatment. The paw-paw leaf extract reduced the malaria parasite count from an average of 9.2±0.06 to 2.6±0.06; while the mango leaf extract showed an average reduction from 9.8±0.01 to 3.2±0.03 after six days of treatment. However, a combination of the two leaf extracts (1:1) exhibited a higher antimalaria efficacy than the separate leaf extracts, reducing the parasite count from 9.4±0.031 to 2.0±0.15. The public health implications of these findings are discussed.

Publisher: Bachudo Science Co. Ltd.

Use local plants to reduce malaria
Papaya leaf tea
The organisation ECHO reports that many people around the world take a tea of papaya leaves to reduce or completely avoid having malaria...since papaya is found nearly everywhere, it is good to use it. The tea must be taken regularly - twice a week - to have an effect. You use one fresh leaf which you boil in 2 litres of water. Let it boil a short time and let it rest for some minutes. Drink 1/4 of a cup each time. It is bitter, but it is not poisonous and is used traditionally many places against a variety of problems. You should not eat the raw leaves, however.
You can also make a powder from dried papaya leaves. To make one cup of tea use a quarter teaspoon of powder.


Table 1 - Some plants used in the treatment of malaria in the Domingo Sifontes municipality, Bolivar State, Venezuela.

<table>
<thead>
<tr>
<th>Species</th>
<th>Family</th>
<th>PU</th>
<th>PP</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azadirachta indica A.Juss.</td>
<td>Meliaceae</td>
<td>d</td>
<td>d</td>
<td>Used to treat malaria in India and Sudan</td>
</tr>
<tr>
<td>Bixa orellana L.</td>
<td>Bixaceae</td>
<td>1,r</td>
<td>d</td>
<td>Bixa orellana</td>
</tr>
</tbody>
</table>

English Title: Comparative efficacy of crude aqueous extract of <i>Mangifera indica</i>, <i>Carica papaya</i> and sulphadoxine pyrimethamine on mice infested with malaria parasite <i>in vivo</i>.

Personal Authors: Uhegbu, F. O., Elekwa, I., Ukoha, C.

Author Affiliation: Department of Biochemistry, Faculty of Biological and Physical Sciences, Abia State University, Uturu, Nigeria.

Document Title: Global Journal of Pure and Applied Sciences, 2005 (Vol. 11) (No. 3) 399-401
Carica papaya L. Caricaceae ft j Carica papaya Used to treat malaria in Brazil an Surinam18 19
Cedrela odorata L. Meliaceae sb mwv Cedrela odorata Used to treat malaria elsewhere.10
Eucalyptus globulus Labill. Myrtaceae 1 d Eucalyptus globulus Used to treat malaria in Venezuela12 13
Heliotropium indicum L. Boraginaceae 1 d Heliotropium indicum Used to treat malaria in Venezuela.1
Momordica charantia L. Cucurbitaceae 1 d Momordica charantia Used to treat malaria in Brazil, Colombia, Guyana, Trinidad, West Indies, and Venezuela.1 4 12 13 17 20 24
Parthenium hysterophorus L. Compositae r d Parthenium hysterophorus Used to treat malaria in Venezuela.1
Petiveria alliacea L. Phytolaccaceae Ep d Petiveria alliacea Used to treat malaria in Brazil.20
Phyllanthus niruri L. Phyllanthus niruri and P. niruri Used to treat malaria elsewhere.9 20 and
Phyllanthus niruri spp other spp Used in Brazil, Cuba and Surinam13 20 21
Plantago australis Lam. Plantaginaceae 1 d Plantago australis Used to treat malaria in Venezuela.14
Scoparia dulcis L. Scrophulariaceae 1, r d Scoparia dulcis Used to treat malaria in Colombia and Venezuela.8 11 12
Senna occidentalis L. Link. Leguminosae 1, r d Senna occidentalis Used to treat malaria in Brazil,
Colombia and Venezuela.2 5 7 8 12 19
Solanum spp. Solanaceae ep d Solanum spp Used very widely to
treat malaria.2 5 7 8 20 21 22 23 24
Spondias mombin L. Anacardiaceae 1 d Spondias mombin Used to treat malaria in Venezuela.1
Taraxacum officinale Web. Compositae Lr d Taraxacum officinale Used to treat malaria in Venezuela.1
Verbena litoralis H.B.K Verbenaceae 1 d Verbena litoralis Used to treat malaria in Venezuela.1
Vernonia spp Compositae sb d Vernonia spp Used to treat malaria in Brazil,
Colombia and Venezuela.7 12 20
PU: part of the plant part used: ep = entire plant; ft = fruit; l = leaf; r = roots; s = seed; sb = stem bark. PP: preparations: d =
decoction; j = juice; mwv = macerate in white vine.

-Preliminary assessment of medicinal plants used as antimalarials in the southeastern Venezuelan Amazon
Avaliação preliminar de plantas medicinais usadas como antimaláricos no sudeste amazônico Venezuelano
Alejandro Caraballo, Brigida Caraballo and Alexis Rodríguez-Acosta2

There is an abundance of information on this subject and since it is a bit off-topic I have only provided this.
I want to tell you how to get papaya leaves on your own cheaply.

Go to the grocery store and buy a papaya. Take the seeds out and rub off the gelatinous coating. Plant the seeds in sandy soil in a container that drains. Put it in a window if you live where the temperature is colder than 75 degrees F. Put it outside if you live in a warm climate. Seeds should come out of the ground in less than three weeks. Once the plant is eight inches tall you can start to gently take off leaves. Always leave at least two larger leaves on the plant. Tie the stems together and hang upside down until the leaves air dry. Separate the stems from the leaves. Store the leaves in an air-tight container. The easiest way to prepare the tea is in your coffee maker. Put a filter in first and then crunch up three palm-to-hand sized leaves. Even better if you have a coffee grinder to grind them up. You’ll end up with just a teaspoon, but this is all you need to make a whole pot. Brew it up and enjoy. If you want to drink every day then you’ll need three plants.

If you don’t like planting or need some tea now you might find it at your health food store. I went to my local health food store and they sold papaya leaves for tea but I didn’t understand why they were brown. I don’t know if the benefits are still retained in brown leaves. If it were me I would request the dried green ones. If all else fails try a google search on the internet, or you can always contact me. My goal is that the leaves become a standard on the grocery store shelf.

Last weekend I was out in my car with my son and I saw this car in the other lane with a bumper sticker with a pink ribbon on it that said, “Pray for a Cure”. If it weren’t for worrying about embarrassing my son, I would have signaled to this woman in this car to pull over so that I could talk to her about papaya leaves. This is why I need you to help spread this information.

A mentor of mine told me that when he studied at Oxford University in England he was taught that intelligence was not necessarily the search for the right answer, but instead, the passion to find the right question. After my research, my conclusion is that I ask the wrong question when I ask for a “cure” for cancer. This is as awkward as asking for a cure for aging, or a cure for gravity. As one of the great cancer scientists concluded, cancer is the “natural” state in this world, or the state of equilibrium. It takes work to oxygenate our cells. This is life. We do this by eating the right foods, breathing the right air, and exercising. We do this by opening our spirits and laughing. We do this by loving. By my faith, eternal life is God’s love and this is our choice to receive and give life to others.

What is the right question? Maybe it is, “How do I live?” instead of, “How do I try not to die”. Eat what your body needs to live (eleven servings of fresh vegetables per day and four servings of fruit), don’t eat what kills you (dead meat, sugar, and processed foods), and supplement with enzymes like papaya tea to fight other carcinogens in this world. If we could do this our whole lives I believe we could end up like the 100% mice survivors. Since I’ve never met a human who has been able to do this perfectly, then maybe we can live longer and live well by trying to eat better and supplementing with enzymes like papaya tea.

I would love for you to use papaya leaf tea to fight for more life. Tell your children, tell your friends, and talk to your doctor.

“Let your food be your medicine and your medicine be your food.” -Hippocrates